

Exploring the role of ChatGPT in patient care (diagnosis and treatment) and medical research: A systematic review

Year: 2023 | Citations: 154 | Authors: R. Garg, V. L. Urs, Akshya Anand Agrawal, S. Chaudhary, V. Paliwal

Abstract

Background ChatGPT(Chat Generative Pre-trained Transformer) is an artificial intelligence (AI) based on a natural language processing tool developed by OpenAI (California, USA). This systematic review examines the potential of Chat GPT in diagnosing and treating patients and its contributions to medical research. **Methods** In order to locate articles on ChatGPT's use in clinical practise and medical research, this systematic review used PRISMA standards and conducted database searches across several sources. Selected records were analysed using ChatGPT, which also produced a summary for each article. The resultant word document was transformed to a PDF and handled using ChatPDF. The review looked at topics pertaining to scholarly publishing, clinical practise, and medical research. **Results** We reviewed 118 publications. There are difficulties and moral conundrums associated with using ChatGPT in therapeutic settings and medical research. Patient inquiries, note writing, decision-making, trial enrolment, data management, decision support, research support, and patient education are all things that ChatGPT can help with. However, the solutions it provides are frequently inadequate and inconsistent, presenting issues with its originality, privacy, accuracy, bias, and legality. When utilising ChatGPT for academic writings, there are issues with prejudice and plagiarism, and because it lacks human-like characteristics, its authority as an author is called into question. **Conclusions** ChatGPT has limitations when used in research and healthcare. Even while it aids in patient treatment, concerns regarding accuracy, authorship, and bias arise. Currently, ChatGPT can serve as a "clinical assistant" and be a huge assistance with research and scholarly writing.